

IN THE CLAIMS:

Claims 1-25 (cancelled).

Claim 26 (Original): A method for forming an optical waveguide device comprising the steps of:

forming an optical waveguide path within a surface of the electro-optical crystal substrate;

forming a buffer layer comprising silicon, an element in column 4 (IVB) of the periodic table, oxygen, and nitrogen, positioned above the optical waveguide path;

forming at least one electrode positioned above the buffer layer for applying an electric field to the optical waveguide path;

forming a connecting means for interconnecting the thermal stabilization buffer layer to another surface of the electro-optical crystal substrate that is opposite to the surface in which the optical waveguide path is formed.

Claim 27 (Original): The method for forming an optical waveguide device of claim 26, wherein the buffer layer is sputter deposited using a target comprised of silicon nitride and a nitride of an element in column 4 (IVB) of the periodic table.

Claim 28 (Original): The method for forming an optical waveguide device of claim 27, wherein the buffer layer is sputter deposited in atmosphere containing O₂ and N₂.

Claim 29 (Original): The method for forming an optical waveguide-device of claim 27, wherein the target further comprises a metal from columns 3-16 of the Periodic Table, in metal or oxide form.

Claim 30 (Original): The method for forming an optical waveguide device of claim 27, wherein an additional target containing a metal from columns 3-16 of the Periodic Table, in metal or oxide form, is exposed while the buffer layer is sputter deposited.